

FILEID**LNKSTATSO

N 10

```
1      0001 0 module lnk_statsout          ! LINKER STATISTICS ROUTINE
2      0002 0
3      0003 0     (ident = 'V04-000'
4      0004 0     ,addressing_mode
5      0005 0     (external = general
6      0006 0     ,nonexternal = long_relative
7      0007 0   )
8      0008 1 begin
9      0009 1
10     0010 1 ****
11     0011 1 *
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29     0029 1 *
30     0030 1 *
31     0031 1 ****
32     0032 1 ++
33     0033 1 FACILITY: LINKER
34     0034 1
35     0035 1 ABSTRACT: ROUTINE DOES ALL THE WORK OF GATHERING AND OUTPUTTING STATISTICS OF THE LINK
36     0036 1
37     0037 1
38     0038 1 ENVIRONMENT: STARLET NATIVE MODE
39     0039 1
40     0040 1 AUTHOR: T.J. PORTER, CREATION DATE: 27-JUN-77
41     0041 1
42     0042 1 MODIFIED BY:
43     0043 1
44     0044 1   V03-002 ADE0001 Alan D. Eldridge 14-Aug-1984
45     0045 1   Only output the options file contents if a full map
46     0046 1   is requested.
47     0047 1
48     0048 1   V03-001 JWT0099 Jim Teague 14-Mar-1983
49     0049 1   New CLI interface.
50     0050 1
51     0051 1 --
52     0052 1
53     0053 1 TABLE OF CONTENTS:
54     0054 1
55     0055 1 forward routine
56     0056 1   lnk$statsout : novalue;           ! OUTPUT THE STATISTICS
57     0057 1 !
```

```
: 58      0058 1 | INCLUDE FILES:  
59      0059 1 | library 'LIBL32';  
60      0060 1 | require 'PREFIX';  
61      0061 1 | library 'DATBAS';  
62      0062 1 | sd ('$LINE');  
63      0177 1 |  
64      0178 1 | MACROS:  
65      0179 1 |  
66      0180 1 | macro  
67      0181 1 |     textadr = 0,0,32,0%.  
68      0182 1 |     fltsadr = 1,0,32,0%.  
69      0183 1 |     cputadr = 2,0,32,0%.  
70      0184 1 |     stimadr = 3,0,32,0%.  
71      0185 1 |  
72      0186 1 |  
73      0187 1 |  
74      0188 1 |  
75      0189 1 | EQUATED SYMBOLS:  
76      0190 1 |  
77      0191 1 | literal  
78      0192 1 |     bufferleng = 132;           ! OUTPUT LINE BUFFER  
79      0193 1 |  
80      0194 1 |  
81      0195 1 | EXTERNAL REFERENCES:  
82      0196 1 |  
83      0197 1 | external  
84      0198 1 |     lnk$gl_optextp : ref block [, byte],  
85      0199 1 |     lnk$gl_ctlmsk : block [, byte],  
86      0200 1 |     lnk$gl_minaddr,  
87      0201 1 |     lnk$gl_memlhd,  
88      0202 1 |     lnk$gl_cpustim,  
89      0203 1 |     lnk$gl_futlsrch,  
90      0204 1 |     lnk$gl_librecs,  
91      0205 1 |     lnk$gl_nmodsexp,  
92      0206 1 |     lnk$gl_nmodsrch,  
93      0207 1 |     lnk$gl_objrecs,  
94      0208 1 |     lnk$gw_dbgrecs : word,  
95      0209 1 |     lnk$gl_dbgestim,  
96      0210 1 |     lnk$gw_dstvbn : word,  
97      0211 1 |     lnk$gw_dstblk : word,  
98      0212 1 |     lnk$gl_dstend,  
99      0213 1 |     lnk$gw_symrecs : word,  
100     0214 1 |     lnk$gw_gstrecs : word,  
101     0215 1 |     lnk$qq_startim,  
102     0216 1 |     lnk$qq_endtim,  
103     0217 1 |     lnk$qq_ps1stim,  
104     0218 1 |     lnk$qq_alostim,  
105     0219 1 |     lnk$qq_ps2stim,  
106     0220 1 |     lnk$qq_mapstim,  
107     0221 1 |     lnk$qq_stbstim,  
108     0222 1 |     lnk$gl_ps1cput,  
109     0223 1 |     lnk$gl_alocput,  
110     0224 1 |     lnk$gl_ps2cput,  
111     0225 1 |     lnk$gl_mapcput,  
112     0226 1 |     lnk$gl_stbcput,  
113     0227 1 |     lnk$gl_ps1flts,  
114     0228 1 |     lnk$gl_aloflts,  
|  
|     ! GET PROCESS HEADER DEFINITIONS  
|     ! USEFUL MACROS AND VARIABLES  
|     ! LINKER DATA STRUCTURES  
|  
|     ! POINTER TO OPTIONS TEXT  
|     ! LINK CONTROL FLAGS  
|     ! LOWEST ADDRESS ALLOCATED  
|     ! FREE MEMORY LISTHEAD  
|     ! CPU TIME AT START  
|     ! NUMBER OF SYMBOLS SEARCHED FOR IN THE WRONG LIBRARY  
|     ! NUMBER OF OBJ RECORDS READ FROM LIBRARIES  
|     ! NUMBER MODULES EXTRACTED EXPLICITLY  
|     ! NUMBER MODULES EXTRACTED TO RESOLVE SYMBOLS  
|     ! TWO PASS COUNT OF OBJECT RECORDS READ  
|     ! NUMBER OF DEBUG DATA RECORDS  
|     ! NUMBER OF BYTES IN DEBUG RECORDS  
|     ! VBN OF DEBUG SYMBOL TABLE  
|     ! NUMBER OF BLOCKS ALLOCATED  
|     ! END ADDRESS IN THE DST  
|     ! NUMBER OF GLOBAL SYMBOL TABLE RECORDS WRITTEN TO SEPARATE FILE  
|     ! NUMBER WRITTEN TO IMAGE FILE  
|     ! START TIME QUADWORD  
|     ! END TIME QUADWORD  
|     ! PASS 1 START TIME  
|     ! ALLOCATION/RELOCATION START TIME  
|     ! PASS 2 START TIME  
|     ! BULK OF MAP START TIME  
|     ! SYMBOL TABLE OUTPUT START TIME  
|     ! CPU TIME AT START OF PASS 1  
|     ! CPU TIME AT START OF ALLOCATION PHASE  
|     ! CPU TIME AT START OF PASS 2  
|     ! CPU TIME AT START OF MAP OUTPUT  
|     ! CPU TIME AT START OF SYMBOL TABLE OUTPUT  
|     ! PAGE FAULT COUNT AT START OF PASS 1  
|     ! PAGE FAULT COUNT AT START OF ALLOCATION PHASE
```

```

: 115      0229 1   Lnk$gl_ps2flts,
: 116      0230 1   Lnk$gl_mapflts,
: 117      0231 1   Lnk$gl_stbflts,
: 118      0232 1   Lnk$gl_spagflts,
: 119      0233 1   Lnk$gl_endflts,
: 120      0234 1   Lnk$gl_endcput;
: 121      0235 1
: 122      0236 1   external routine
: 123      0237 1   cli$get_value,
: 124      0238 1   Lnk$calcelaps.
: 125      0239 1
: 126      0240 1   Lnk$mapout;
: 127      0241 1
: 128      0242 1   external literal
: 129      0243 1   lenSc_mapline : wordlit,
: 130      0244 1   Lnk$k_libblocks : short;
: 131      0245 1
: 132      0246 1   literal
: 133      0247 1   phases = 9;
: 134      0248 1
: 135      0249 1
: 136      0250 1   | MODULE OWN STORAGE:
: 137      0251 1
: 138      0252 1   own
: 139      0253 1   command_desc : dynamic_descriptor;
: 140      0254 1   psect
: 141      0255 1   own = Split$(nopic, concatenate, local, noshare, noexecute, nowrite);
: 142      0256 1   own
: 143      0257 1   phastahd1 : descriptor ('!50<Performance Indicators!>Page Faults    CPU Time      Elapsed Time'),
: 144      0258 1   phastahd2 : descriptor ('!50<!22*-!>!11*- !8*- !12*-'),
: 145      0259 1   phastafmt : descriptor ('!50<!AS!>!11UL    !2ZL:!2ZL:!2ZL.!2ZL    !%T'),
: 146      0260 1   totaltim : descriptor ('Total run values:'),
: 147      0261 1   comandtim : descriptor ('    Command processing:'),
: 148      0262 1   pass1tim : descriptor ('    Pass 1:'),
: 149      0263 1   alloctim : descriptor ('    Allocation/Relocation:'),
: 150      0264 1   pass2tim : descriptor ('    Pass 2:'),
: 151      0265 1   maptim : descriptor ('    Map data after object module synopsis:'),
: 152      0266 1   stbtim : descriptor ('    Symbol table output:'),
: 153      P 0267 1   workset : descriptor (
: 154      0268 1   'Using a working set limited to !UL pages and !UL pages of data storage (excluding image)'),
: 155      0269 1   objrecs : descriptor ('!50<Total number object records read (both passes):!>!UL'),
: 156      P 0270 1   librecs : descriptor (
: 157      0271 1   'of which !UL were in libraries and !UL were DEBUG data records containing !UL bytes')
: 158      P 0272 1   dbgdata : descriptor ('!UL bytes of DEBUG data were written, starting at VBN !UW with !UW blocks allocated')
: 159      0273 1
: 160      0274 1   extrmods : descriptor ('!50<Number of modules extracted explicitly!> = !UL'),
: 161      0275 1   srchmods : descriptor ('    with !UL extracted to resolve undefined symbols'),
: 162      0276 1   futlsrch : descriptor ('!UL library searches were for symbols not in the library searched'),
: 163      0277 1   symrecs : descriptor ('A total of !UL global symbol table records was written'),
: 164      0278 1   phastatbl : blockvector [phases, 4] initial (
: 165      0279 1   0 , Lnk$gl_spagflts, Lnk$gl_cpustim, Lnk$gg_startim,
: 166      0280 1   comandtim, Lnk$gl_ps1flts, Lnk$gl_ps1cpus, Lnk$gg_ps1stim,
: 167      0281 1   pass1tim, Lnk$gl_&loflts, Lnk$gl_&locput, Lnk$gg_&lostim,
: 168      0282 1   alloctim, Lnk$gl_ps2flts, Lnk$gl_ps2cpus, Lnk$gg_ps2stim,
: 169      0283 1   pass2tim, Lnk$gl_mapflts, Lnk$gl_mapcpus, Lnk$gg_mapstim,
: 170      0284 1   maptim, Lnk$gl_stbflts, Lnk$gl_stbcput, Lnk$gg_stbstim,
: 171      0285 1   stbtim, Lnk$gl_endflts, Lnk$gl_endcput, Lnk$gg_endtim,

```

LNK_STATSOUT
VO4=000

E 11
16-Sep-1984 00:33:36 VAX-11 Bliss-32 V4.0-742
14-Sep-1984 12:40:36 [LINKER.SRC]LNKSTATSO.B32;1

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: 172 0286 1 0 ,lnk\$gl_spagflts,lnk\$gl_cpustim,lnk\$gq_startim,
: 173 0287 1 totaltim,lnk\$gl_endflts,[nk\$gl_endcpu,[nk\$gq_endtim],
: 174 0288 1 cvt2secs : initial (100)
: 175 0289 1 cvtsecsmins : initial (60);
: 176 0290 1

```
: 178      0291 1 global routine Lnk$statsout : novalue =      ! OUTPUT STATISTICS
: 179      0292 2 begin
: 180      0293 2 ++
: 181      0294 2 FUNCTIONAL DESCRIPTION:
: 182      0295 2
: 183      0296 2 THIS MODULE COMPUTES AND OUTPUTS TO THE MAP A GAGGLE OF THE STATISTICS
: 184      0297 2 ACCUMULATED BY THE LINKER AND THE SYSTEM DURING THE RUN
: 185      0298 2
: 186      0299 2
: 187      0300 2 FORMAL PARAMETERS:
: 188      0301 2
: 189      0302 2
: 190      0303 2
: 191      0304 2
: 192      0305 2
: 193      0306 2
: 194      0307 2
: 195      0308 2
: 196      0309 2
: 197      0310 2
: 198      0311 2
: 199      0312 2
: 200      0313 2
: 201      0314 2
: 202      0315 2
: 203      0316 2
: 204      0317 2
: 205      0318 2
: 206      0319 2
: 207      0320 2
: 208      0321 2
: 209      0322 2
: 210      0323 2
: 211      0324 2
: 212      0325 2
: 213      0326 2
: 214      0327 2
: 215      0328 2
: 216      0329 2
: 217      0330 2
: 218      0331 2
: 219      0332 2
: 220      0333 2
: 221      0334 2
: 222      0335 2
: 223      0336 2
: 224      0337 2
: 225      0338 2
: 226      0339 2
: 227      0340 2
: 228      0341 2
: 229      0342 2
: 230      0343 2
: 231      0344 2
: 232      0345 2
: 233      0346 2
: 234      0347 2
:          begin
:          ++
:          FUNCTIONAL DESCRIPTION:
:          THIS MODULE COMPUTES AND OUTPUTS TO THE MAP A GAGGLE OF THE STATISTICS
:          ACCUMULATED BY THE LINKER AND THE SYSTEM DURING THE RUN
:          FORMAL PARAMETERS:
:          NONE
:          IMPLICIT INPUTS:
:          NONE
:          IMPLICIT OUTPUTS:
:          NONE
:          ROUTINE VALUE:
:          COMPLETION CODES:
:          NONE
:          SIDE EFFECTS:
:          NONE
:          --
:          builtin
:          ediv;
:          local
:          buffer : ch$sequence (bufferleng),           ! OUTPUT LINE BUFFER
:          outbufdesc : vector [2],                   ! ITS DESCRIPTOR
:          pagefaults,
:          cputime : vector [2],
:          secfrac,
:          cpusecs : vector [2],
:          cpumins : vector [2],
:          cpuhours,
:          worksetlim,
:          memused : ref vector,
:          dbgbytes,
:          outline leng : word;                      ! LENGTH OF FORMATTED LINE RETURNED BY FAO
:          outbufdesc [0] = bufferleng;                ! INITIALIZE FAO'S BUFFER
:          outbufdesc [1] = buffer;                   ! DESCRIPTOR
:          cputime [1] = 0;
:          cpusecs [1] = 0;
:          cpumins [1] = 0;
:          Lnk$mapout (buffer, 0);
:          $fao (phastahdi, outline leng, outbufdesc);
:          Lnk$mapout (buffer, .outline leng);
```

```
235      0348 2     $fao (phastahd2, outline leng, outbufdesc);
236      0349 2     Lnk$mapout (buffer, .outline[leng]);
237      0350 2
238      0351 2     incr i from 1 to phases - 1 do
239      0352 2
240      0353 2     if .phastatbl [.i, textadr] neq 0
241      0354 2     then
242      0355 2     begin
243      0356 3     pagefaults = ..phastatbl [.i, fltsadr] - ..phastatbl [.i - 1, fltsadr];
244      0357 3     cputime [0] = ..phastatbl [.i, cputadr] - ..phastatbl [.i - 1, cputadr];
245      0358 3     ediv (cvt2secs, cputime [0], cpusecs [0], secfrac);
246      0359 3     ediv (cvtsecsmins, cpusecs [0], cpumins [0], cpusecs [0]);
247      0360 3     ediv (cvtsecsmins, cpumins [0], cpuhours, cpumins [0]);
248      P 0361 3     $fao (phastafmt, outline leng, outbufdesc, .phastatbl [.i, textadr], .pagefaults, .cpuhours,
249      P 0362 3     cpumins [0], cpusecs [0], secfrac,
250      P 0363 3     Lnk$calcclaps (.phastatbl [.i - 1, stimadr],
251      0364 3     .phastatbl [.i, stimadr]));
252      0365 3     Lnk$mapout (buffer, .outline leng);
253      0366 2
254      0367 2
255      0368 2     $adjwsl (pagcnt = 0, wsetlm = worksetlim);
256      0369 2     memused = Lnk$gl_memlhd;
257      0370 2
258      0371 2     while .memused [0] neq 0 do
259      0372 2     memused = .memused [0];
260      0373 2
261      0374 2     memused = (memused [0] - .Lnk$gl_minaddr + 511)/512;
262      0375 2     Lnk$mapout (buffer, 0);
263      0376 2     $fao (workset, outline leng, outbufdesc, .worksetlim, .memused);
264      0377 2     Lnk$mapout (buffer, .outline leng);
265      0378 2     Lnk$mapout (buffer, 0);
266      0379 2     $fao (objrecs, outline leng, outbufdesc, .Lnk$gl_objrecs);
267      0380 2     Lnk$mapout (buffer, .outline leng);
268      0381 2     $fao (librecs, outline leng, outbufdesc, .Lnk$gl_librecs, .Lnk$gw_dbgrecs, .Lnk$gl_dbgestim);
269      0382 2     Lnk$mapout (buffer, .outline leng);
270      0383 2
271      0384 3     if (dbgbytes = .Lnk$gl_dstend) neq 0 and (.Lnk$gl_ctlmsk [Lnk$v_dbg] or .Lnk$gl_ctlmsk [Lnk$v_trace])
272      0385 2     then
273      0386 3     begin
274      0387 3     $fao (dbgdata, outline leng, outbufdesc, .dbgbytes, .Lnk$gw_dstvbn, .Lnk$gw_dstblk);
275      0388 3     Lnk$mapout (buffer, .outline leng);
276      0389 2
277      0390 2
278      0391 2     Lnk$mapout (buffer, 0);
279      0392 2     $fao (extrmods, outline leng, outbufdesc, .Lnk$gl_nmodsexp);
280      0393 2     Lnk$mapout (buffer, .outline leng);
281      0394 2     $fao (srchmods, outline leng, outbufdesc, .Lnk$gl_nmodsrch);
282      0395 2     Lnk$mapout (buffer, .outline leng);
283      0396 2     Lnk$mapout (buffer, 0);
284      0397 2     $fao (futlsrch, outline leng, outbufdesc, .Lnk$gl_futlsrch);
285      0398 2     Lnk$mapout (buffer, .outline leng);
286      0399 2     Lnk$mapout (buffer, 0);
287      0400 2     $fao (symrecs, outline leng, outbufdesc, (.Lnk$gw_symrecs + .Lnk$gw_gstrecs));
288      0401 2     Lnk$mapout (buffer, .outline leng);
289      0402 2     Lnk$mapout (buffer, 0);           ! SKIP A LINE
290      0403 2
291      0404 2 ! PRINT THE COMMAND LINE
```

```

        .TITLE LNK_STATSOUT
        .IDENT \V04-000\

        .PSECT SPLITS,NOWRT,NOEXE,2

        45 4E 49 4C 24 00000 P.AAB: .ASCII \$LINE\
        00000005 00005 .BLKB 3
        00000000 00008 P.AAA: .LONG 5
        0000C .ADDRESS P.AAB
        30 35 21 00010 P.AAC: .ASCII \!50<Performance Indicators!>Page Faults-
        6E 49 20 0001F \
        61 50 3E 21 73 72 6F 66 72 65 50 3C 09 73 74 61 63 69 64 00 73 74 6C 75 61 46 20 55 50 43 0002E
        65 73 70 61 6C 45 09 65 6D 69 54 20 54 20 64 00038
        61 50 3E 21 73 72 6F 66 72 65 50 3C 00 00 65 6D 69 54 20 64 00047
        65 73 70 61 6C 45 09 65 6D 69 54 20 55 50 43 00050 PHASTAHD1:
        61 50 3E 21 73 72 6F 66 72 65 50 3C 00 00 65 6D 69 54 20 64 00054 .LONG 61
        65 73 70 61 6C 45 09 65 6D 69 54 20 55 50 43 00058 P.AAC: .ADDRESS P.AAC
        61 50 3E 21 73 72 6F 66 72 65 50 3C 00 00 65 6D 69 54 20 64 00067
        65 73 70 61 6C 45 09 65 6D 69 54 20 55 50 43 00074 PHASTAHD2:
        61 50 3E 21 73 72 6F 66 72 65 50 3C 00 00 65 6D 69 54 20 64 00078 .LONG 27
        65 73 70 61 6C 45 09 65 6D 69 54 20 55 50 43 00079 P.AAD: .ADDRESS P.AAD

```

LNK STATSOUT
V04=000

I 11
16-Sep-1984 00:33:36 VAX-11 Bliss-32 V4.0-742
14-Sep-1984 12:40:36 [LINKER.SRC] LNKSTATS0.B32;1

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09 4C 55 31 31 21 21 3E 21 53 41 21 3A 3C 30 35 21 0007C P.AAE: .ASCII \!50<!AS!>!11UL\<9>\!2ZL:!2ZL:!2ZL\ 0008B
2E 4C 5A 32 21 3A 4C 5A 32 21 3A 4C 5A 32 21 0009A
0009E 00000026 000A4 PHASTAFMT: .ASCII <9>\!%T\<0><0>
00000000' 000A8
000AC P.AAF: .ASCII \Total run values:\<0><0><0>
000BB 000C0 TOTALTIM: .LONG 38
.ADDRESS P.AAE
00000011 000C4 P.AAG: .ASCII \ Command processing:\<0>
.ADDRESS P.AAF
000C8 000D7 000E0 COMANDTIM: .LONG 17
.ADDRESS P.AAG
000C4 000D7 000E0 PASS1TIM: .LONG 23
.ADDRESS P.AAG
000E4 000F4 P.AAH: .ASCII \ Pass 1:\<0>
.ADDRESS P.AAH
000E8 000F4 PASS2TIM: .LONG 11
.ADDRESS P.AAH
000F8 0010B P.AAI: .ASCII \ Allocation/Relocation:\<0><0>
000FC 00118 ALLOCTIM: .LONG 26
.ADDRESS P.AAI
0011C 00120 P.AAJ: .ASCII \ Pass 2:\<0>
.ADDRESS P.AAJ
0012C 00130 P.AAK: .ASCII \ Map data after object module synopsis\
00134 00143 00152 0015C 00160 MAPTIM: .ASCII \s:\<0><0>
00143 00152 0015C 00160 00164 00168 P.AAL: .ASCII \ Symbol table output:\
.ADDRESS P.AAK
00164 00177 00180 STBTIM: .LONG 24
.ADDRESS P.AAL
00177 00184 P.AAM: .ASCII \Using a working set limited to !UL pages\
00188 00197 001A6 001B0 001BF 001CE 001D8 WORKSET: .ASCII \g image\
00197 001A6 001B0 001BF 001CE 001D8 001E0 001E4 001E8 001F7 P.AAN: .ASCII \!50<Total number object records read (bo\ 001E4 001E8 001F7
001A6 001B0 001BF 001CE 001D8 001E0 001E4 001E8 001F7 00206 00210 0021F P.AAN: .ADDRESS P.AAM
001B0 001BF 001CE 001D8 001E0 001E4 001E8 001F7 00206 00210 0021F 00220 OBJRECS: .LONG 56
001BF 001CE 001D8 001E0 001E4 001E8 001F7 00206 00210 0021F 00220 00224 P.AAO: .ASCII \ of which !UL were in libraries and !\ 00224
00228 00228 00228

LN
VO

LNK_STAT\$OUT
V04=000

K 11
16-Sep-1984 00:33:36 VAX-11 Bliss-32 v4.0-742
14-Sep-1984 12:40:36 [LINKER.SRC]LNKSTATSO.B32:1

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```

00000000G 00000000G 00000000' 00000000G 00000000G 00000000 00458 .LONG 0 LNK$GQ_STBSTM, STBTIM, LNK$GL_ENDFLTS, -
00000000G 0045C .ADDRESS 0 LNK$GL_ENDCPUT, LNK$GQ_ENDIAN
00000000G 00474 LNK$GL_SPAGFLTS, LNK$GL_CPUSTIM, -
00000064 00478 CVT2SECS: LNK$GQ_STARTIM, TOTALTIM, LNK$GL_ENDFLTS, -
0000003C 0047C CVTSECSMINS: .LONG 100 ;
00000000 00004 .LONG 60 ;
.PSECT $OWNS,NOEXE,2

0000 00000 COMMAND_DESC: .WORD 0
00 00002 .BYTE 0
02 00003 .BYTE 2
00000000 00004 .LONG 0

SD$_LINE= P.AAA
.Extrn LNK$GL_OPTEXTP, LNK$GL_CTLMSK
.Extrn LNK$GL_MINADDR, LNK$GL_MEMLHD
.Extrn LNK$GL_CPUSTIM, LNK$GL_FUTLSRCH
.Extrn LNK$GL_LIBRECS, LNK$GL_NMODSEXP
.Extrn LNK$GL_NMCDSRCH
.Extrn LNK$GL_OBJRECS, LNK$GW_DBGRECS
.Extrn LNK$GL_DBGESTIM
.Extrn LNK$GW_DSTVBN, LNK$GW_DSTBLKS
.Extrn LNK$GL_DSTEND, LNK$GW_SYMRECS
.Extrn LNK$GW_GSTREC$, LNK$GQ_STARTIM
.Extrn LNK$GQ_ENDTIM, LNK$GQ_PS1STIM
.Extrn LNK$GQ_ALOSTIM, LNK$GQ_PS2STIM
.Extrn LNK$GQ_MAPSTIM, LNK$GQ_STBSTM
.Extrn LNK$GL_PS1CPUT, LNK$GL_ALOCPUT
.Extrn LNK$GL_PS2CPUT, LNK$GL_MAPCPUT
.Extrn LNK$GL_STBCPUT, LNK$GL_PS1FLTS
.Extrn LNK$GL_ALOFLTS, LNK$GL_PS2FLTS
.Extrn LNK$GL_MAPFLTS, LNK$GL_STBFLTS
.Extrn LNK$GL_SPAGFLTS
.Extrn LNK$GL_ENDFLTS, LNK$GL_ENDCPUT
.Extrn CLISGET VALUE, LNK$CALCELAPS
.Extrn LNK$MAPOUT, LENSC_MAPLINE
.Extrn LNK$K_LIBBLOCKS
.Extrn SYSSFAO, SYSSADJWSL
.PSECT $CODE$,NOWRT,2

OFFC 00000
.ENTRY LNK$STATSOUT, Save R2,R3,R4,R5,R6,R7,R8,R9,-: 0291
R10,R11
SB 00000000G 00 9E 00002 MOVAB LNK$GL_CTLMSK, R11
5A 00000000G 00 9E 00009 MOVAB SYSSFAO, R10
59 00000000G 00 9E 00010 MOVAB LNK$MAPOUT, R9
58 00000000' EF 9E 00017 MOVAB PHASTATBL, R8
5E FF54 CE 9E 0001E MOVAB -172(SP), SP
20 AE 84 8F 9A 00023 MOVZBL #132 OUTBUFDESC
24 AE 28 AE 9E 00028 MOVAB BUFFER, OUTBUFDESC+4
1C AE D4 0002D CLRL CPUTIME+4

```

LNK_STAT\$OUT
V04=000

L 11
16-Sep-1984 00:33:36 VAX-11 Bliss-32 v4.0-742
14-Sep-1984 12:40:36 [LINKER.SRC]LNKSTATSO.B32;1

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(2)

LN
VO

FF6A 52 69 2C AE 9F 000F9
02 FB 000FC
08 F1 000FF 3\$: PUSHAB BUFFER
5E DD 00105 CALLS #2, LNK\$MAPOUT
7E D4 00107 ACBL #8, #1, I, 1\$
52 00000000G 00 02 FB 00109 PUSHL SP
52 00000000G 00 9E 00110 CLRL -(SP)
52 00000000G 00 62 D5 00117 CALLS #2, SYSSADJWSL
50 00000000G 00 05 13 00119 MOVAB LNK\$GL MEMLHD, MEMUSED
50 01FF C0 9E 00128 TSTL (MEMUSED)
52 50 00000200 8F C7 0012D BEQL 5\$
52 00000000G 00 F7 11 0011B MOVL (MEMUSED), MEMUSED
50 00000000G 00 7E D4 00135 BRB 4\$
50 01FF C0 9E 00128 SUBL3 LNK\$GL MINADDR, MEMUSED, RO
52 50 00000200 8F C7 0012D MOVAB 511(R0) R0
52 00000000G 00 7E D4 00135 DIVL3 #512, R0, MEMUSED
52 00000000G 00 69 2C AE 9F 00137 CLRL -(SP)
52 00000000G 00 02 FB 0013A PUSHAB BUFFER
52 00000000G 00 52 DD 0013D CALLS #2, LNK\$MAPOUT
52 00000000G 00 04 AE DD 0013F PUSHL MEMUSED
52 00000000G 00 28 AE 9F 00142 PUSHL WORKSETLIM
52 00000000G 00 10 AE 9F 00145 PUSHAB OUTBUFDESC
52 00000000G 00 FDF8 C8 9F 00148 PUSHAB OUTLINELENG
6A 00000000G 00 69 2C AE 9F 00148 PUSHAB WORKSET
7E 00000000G 00 05 FB 0014C CALLS #5, SYSSFAO
7E 00000000G 00 04 AE 3C 0014F MOVZWL OUTLINELENG, -(SP)
6A 00000000G 00 69 2C AE 9F 00153 PUSHAB BUFFER
6A 00000000G 00 02 FB 00156 CALLS #2, LNK\$MAPOUT
6A 00000000G 00 7E D4 00159 CLRL -(SP)
6A 00000000G 00 69 2C AE 9F 0015B PUSHAB BUFFER
6A 00000000G 00 02 FB 0015E CALLS #2, LNK\$MAPOUT
6A 00000000G 00 24 AE 9F 00161 PUSHL LNK\$GL OBJRECS
6A 00000000G 00 0C AE 9F 00167 PUSHAB OUTBUFDESC
6A 00000000G 00 FE38 C8 9F 0016A PUSHAB OUTLINELENG
6A 00000000G 00 6A 04 FB 00171 PUSHAB OBJRECS
6A 00000000G 00 7E 04 AE 3C 00174 MOVZWL OUTLINELENG, -(SP)
6A 00000000G 00 6A 04 2C AE 9F 00178 PUSHAB BUFFER
6A 00000000G 00 69 02 FB 0017B CALLS #2, LNK\$MAPOUT
6A 00000000G 00 7E 00000000G 00 00 DD 0017E PUSHL LNK\$GL_DBGESTIM
6A 00000000G 00 7E 00000000G 00 00 3C 00184 MOVZWL LNK\$GW_DBGRECS, -(SP)
6A 00000000G 00 00000000G 00 00 DD 0018B PUSHL LNK\$GL_LIBRECS
6A 00000000G 00 2C AE 9F 00191 PUSHAB OUTBUFDESC
6A 00000000G 00 14 AE 9F 00194 PUSHAB OUTLINELENG
6A 00000000G 00 6A 04 FE98 C8 9F 00197 PUSHAB LIBRECS
6A 00000000G 00 7E 04 AE 3C 0019B CALLS #6, SYSSFAO
6A 00000000G 00 6A 04 2C AE 9F 001A2 MOVZWL OUTLINELENG, -(SP)
6A 00000000G 00 69 02 FB 001A5 PUSHAB BUFFER
6A 00000000G 00 50 00000000G 00 00 DD 001A8 CALLS #2, LNK\$MAPOUT
6A 00000000G 00 50 00000000G 00 30 13 001AF MOVL LNK\$GL_DSTEND, DBGBYTES
6A 00000000G 00 05 27 02 6B 06 E0 001B1 BEQL 7\$
6A 00000000G 00 05 27 AB 02 E1 001B5 BBS #6, LNK\$GL_CTLMSK, 6\$
6A 00000000G 00 7E 00000000G 00 00 3C 001BA BBC #2, LNK\$GL_CTLMSK+2, 7\$
6A 00000000G 00 7E 00000000G 00 00 3C 001C1 MOVZWL LNK\$GW_DSTBLKS, -(SP)
6A 00000000G 00 2C AE 9F 001C8 PUSHL LNK\$GW_DSTVBN, -(SP)
6A 00000000G 00 14 AE 9F 001CD PUSHAB DBGBYTES
6A 00000000G 00 FEF4 C8 9F 001D0 PUSHAB OUTBUFDESC
6A 00000000G 00 14 AE 9F 001D0 PUSHAB OUTLINELENG
6A 00000000G 00 FEF4 C8 9F 001D0 PUSHAB DBGDATA

6A		06	FB	001D4	CALLS #6, SYSSFAO			
7E	04	AE	3C	001D7	MOVZWL OUTLINELENG, -(SP)		0388	
	2C	AE	9F	001DB	PUSHAB BUFFER			
69		02	FB	001DE	CALLS #2, LNK\$MAPOUT			
	7E	D4	001E1	7\$:	CLRL -(SP)		0391	
69	2C	AE	9F	001E3	PUSHAB BUFFER			
	02	FB	001E6		CALLS #2, LNK\$MAPOUT			
69	00000000G	00	DD	001E9	PUSHL LNK\$GL_NMODSEXP		0392	
	24	AE	9F	001EF	PUSHAB OUTBUFDESC			
	0C	AE	9F	001F2	PUSHAB OUTLINELENG			
	FF30	C8	9F	001F5	PUSHAB EXTRMODS			
6A		04	FB	001F9	CALLS #4, SYSSFAO			
7E	04	AE	3C	001FC	MOVZWL OUTLINELENG, -(SP)		0393	
	2C	AE	9F	00200	PUSHAB BUFFER			
69	00000000G	00	DD	00203	CALLS #2, LNK\$MAPOUT			
	24	AE	9F	0020C	PUSHL LNK\$GL_NMODSRCH		0394	
	0C	AE	9F	0020F	PUSHAB OUTBUFDESC			
	FF6C	C8	9F	00212	PUSHAB OUTLINELENG			
6A		04	FB	00216	PUSHAB SRCHMODS			
7E	04	AE	3C	00219	CALLS #4, SYSSFAO			
	2C	AE	9F	0021D	MOVZWL OUTLINELENG, -(SP)		0395	
69		02	FB	00220	PUSHAB BUFFER			
	7E	D4	00223		CALLS #2, LNK\$MAPOUT			
69	2C	AE	9F	00225	CLRL -(SP)		0396	
	02	FB	00228		PUSHAB BUFFER			
69	00000000G	00	DD	0022B	CALLS #2, LNK\$MAPOUT			
	24	AE	9F	00231	PUSHL LNK\$GL_FUTLSRCH		0397	
	0C	AE	9F	00234	PUSHAB OUTBUFDESC			
	B8	A8	9F	00237	PUSHAB OUTLINELENG			
6A		04	FB	0023A	PUSHAB FUTLSRCH			
7E	04	AE	3C	0023D	CALLS #4, SYSSFAO			
	2C	AE	9F	00241	MOVZWL OUTLINELENG, -(SP)		0398	
69		02	FB	00244	PUSHAB BUFFER			
	7E	D4	00247		CALLS #2, LNK\$MAPOUT			
69	2C	AE	9F	00249	CLRL -(SP)		0399	
	02	FB	0024C		PUSHAB BUFFER			
50	00000000G	00	3C	0024F	CALLS #2, LNK\$MAPOUT			
51	00000000G	00	3C	00256	MOVZWL LNK\$GW_SYMRECS, R0		0400	
	6140	9F	0025D		MOVZWL LNK\$GW_GSTRECS, R1			
	24	AE	9F	00260	PUSHAB (R1)[R0]			
	0C	AE	9F	00263	PUSHAB OUTBUFDESC			
	F8	A8	9F	00266	PUSHAB OUTLINELENG			
6A		04	FB	00269	PUSHAB SYMRECS			
7E	04	AE	3C	0026C	CALLS #4, SYSSFAO			
	2C	AE	9F	00270	MOVZWL OUTLINELENG, -(SP)		0401	
69		02	FB	00273	PUSHAB BUFFER			
	7E	D4	00276		CALLS #2, LNK\$MAPOUT			
69	2C	AE	9F	00278	CLRL -(SP)		0402	
	02	FB	0027B		PUSHAB BUFFER			
69	00000000'	53	D4	0027E	CALLS #2, LNK\$MAPOUT			
	EF	9F	00280		CLRL PCHARS		0412	
	FC20	C8	9F	00286	PUSHAB COMMAND_DESC		0413	
00000000G	00	02	FB	0028A	PUSHAB SD_SLINE			
	52	00000000'	FF	3C	00291	CALLS #2, CLISGET_VALUE		0414
	52	D5	00298	8\$:	MOVZWL COMMAND_DESC, CHARS			
	28	15	0029A		TSTL CHARS		0416	
					BLEQ 10\$			

00000000G	50	52	D0 0029C	MOVL	CHARS, R0	: 0418
	8F	50	D1 0029F	CMPL	R0, #LENSC_MAPLINE	
		05	15 002A6	BLEQ	9\$	
	50	0000G	8F 3C 002A8	MOVZWL	#LENSC_MAPLINE, R0	
	54	50	D0 002AD	9\$: MOVL	R0, NCHARS	
		54	DD 002B0	PUSHL	NCHARS	0419
		00000000'FF	43 9F 002B2	PUSHAB	@COMMAND_DESC+4[PCHARS]	
	69		02 FB 002B9	CALLS	#2, LNK\$MAPOUT	
	52		54 C2 002BC	SUBL2	NCHARS, CHARS	0420
	53		54 C0 002BF	ADDL2	NCHARS, PCHARS	0421
			D4 11 002C2	BRB	8\$	0416
	23	01	AB E9 002C4	BLBC	LNK\$GL_CTLMSK+1, 12\$	0426
	50	00000000G	00 D0 002C8	10\$: MOVL	LNK\$GL_OPTEXTP, R0	0427
			1A 13 002CF	BEQL	12\$	
	7E	04	A0 3C 002D1	MOVZWL	4(R0), -(SP)	0430
		06	A0 9F 002D5	PUSHAB	6(R0)	0429
	69		02 FB 002D8	CALLS	#2, LNK\$MAPOUT	
		50 00000000G	00 D0 002DB	MOVL	LNK\$GL_OPTEXTP, R0	0432
	00		60 D0 002E2	MOVL	(R0), [LNK\$GL_OPTEXTP	
			DD 11 002E9	BRB	11\$	0427
			04 002EB	RET		0437

: Routine Size: 748 bytes, Routine Base: \$CODE\$ + 0000

325	0438 1
326	0439 1 end
327	0440 0 eludom

PSECT SUMMARY

Name	Bytes	Attributes
\$SPLIT\$	1152	NOVEC,NOWRT, RD ,NOEXE,NOSHR, LCL, REL, CON,NOPIC,ALIGN(2)
\$OWN\$	8	NOVEC, WRT, RD ,NOEXE,NOSHR, LCL, REL, CON,NOPIC,ALIGN(2)
\$CODE\$	748	NOVEC,NOWRT, RD , EXE,NOSHR, LCL, REL, CON,NOPIC,ALIGN(2)

Library Statistics

File	----- Symbols -----			Pages Mapped	Processing Time
	Total	Loaded	Percent		
\$255\$DUA28:[SYSLIB]LIB.L32;1	18619	9	0	1000	00:02.0
\$255\$DUA28:[LINKER.OBJ]DATBAS.L32;1	538	6	1	28	00:00.8

COMMAND QUALIFIERS

BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/LIS=LISS:LNKSTATSO/OBJ=OBJ\$:LNKSTATSO MSRC\$:LNKSTATSO/UPDATE=(ENH\$:LNKSTATSO)

328 0441 0
Size: 748 code + 1160 data bytes !End of module
Run Time: 00:17.7
Elapsed Time: 00:54.4
Lines/CPU Min: 1499
Lexemes/CPU-Min: 15372
Memory Used: 217 pages
Compilation Complete

0219 AH-BT13A-SE
VAX/VMS V4.0

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